CLAIMS:

1. A vacuum pump comprising:

a housing;

a pump mechanism accommodated in the housing;

an exhaust-passage forming portion located outside of the housing, wherein the exhaust-passage forming portion forms an exhaust passage, which exhaust passage guides gas discharged from the pump mechanism toward the outside of the vacuum pump; and

a thermal conductor connected to an outer surface of the exhaust-passage forming portion, wherein the thermal conductor is made of a material having a thermal conductance that is greater than that of the material for the exhaust-passage forming portion.

2. The pump according to claim 1, wherein the thermal conductor is shaped as a flat plate.

3. The pump according to claim 1, wherein the thermal conductor is formed by bending a flat plate.

4. The pump according to claim 1, wherein a thermal-conductance improver is located between the thermal conductor and the exhaust-passage forming portion.

5. The pump according to claim 4, wherein the thermal-conductance improver is located between the thermal conductor and the exhaust-passage forming portion such that a gap does not exist between the thermal conductor and the exhaust-passage forming portion.

6. The pump according to claim 1, wherein the thermal conductor extends parallel to the direction in which the exhaust passage extends, and holds the exhaust-passage

forming portion.

7. The pump according to claim 1, wherein the gas is a gaseous reaction product generated in a semiconductor fabrication process.

8. The pump according to claim 1, wherein the thermal conductor is fixed to the exhaust-passage forming portion with a metal bolt.

9. The pump according to claim 1, wherein the thermal conductor abuts on an outer surface of the housing.

10. A vacuum pump comprising:

a housing;

a pump mechanism accommodated in the housing;

an exhaust-passage forming portion located on an outer surface of the housing, wherein the exhaust-passage forming portion forms an exhaust passage, which exhaust passage guides gas discharged from the pump mechanism toward the outside of the vacuum pump, wherein the exhaust-passage forming portion includes:

a flange, which is located in an upstream section of the exhaust passage and which receives the gas discharged from the pump mechanism;

a muffler connected to the flange, wherein the gas flows from the flange to the muffler; and

a thermal conductor connected to an outer surface of the flange and the muffler, wherein the thermal conductor is made of a material having a thermal conductance that is greater than that of the material for the exhaust-passage forming portion.

11. The pump according to claim 10, wherein the thermal conductor is shaped as a flat plate.

12. The pump according to claim 10, wherein the thermal conductor is formed by bending a flat plate.

13. The pump according to claim 10, wherein a thermal-conductance improver is located between the thermal conductor and the exhaust-passage forming portion.

14. The pump according to claim 10, wherein the thermal-conductance improver is located between the thermal conductor and the exhaust-passage forming portion such that a gap does not exist between the thermal conductor and the exhaust-passage forming portion.

15. The pump according to claim 14, wherein the thermal conductor extends parallel to the direction in which the exhaust passage extends, and holds the exhaust-passage forming portion.

16. The pump according to claim 10, wherein the gas is a gaseous reaction product generated in a semiconductor fabrication process.

17. The pump according to claim 10, wherein the thermal conductor is fixed to the exhaust-passage forming portion with a metal bolt.

18. The pump according to claim 10, wherein the thermal conductor abuts on an outer surface of the housing.